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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,345	12/20/2001	Donald G. Jackson	D0072 NP	5523

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EXAMINER

SWOPE, SHERIDAN

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/029,345	Applicant(s) JACKSON ET AL.	
	Examiner Sheridan L. Swope	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claims 1-25 are pending.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4, 8, 9, 16-19, drawn to polynucleotides, classified in class 536, subclass 23.2.
- II. Claims 5, 6, 10, 20, drawn to polypeptides, classified in class 435, subclass 196.
- III. Claim 7, drawn to antibodies, classified in class 530, subclass 388.26.
- IV. Claims 11 and 22, in part, drawn to a method of treatment using a polypeptide, classified in class 424, subclass 94.6.
- V. Claim 12, drawn to a method of diagnosis based on mutation of a polynucleotide, classified in class 435, subclass 6.
- VI. Claim 13, drawn to a method of diagnosis based on the expression of a polypeptide, classified in class 435, subclass 6.
- VII. Claim 14, drawn to a process for making a shuffled polynucleotide, classified in class 435, subclass 91.1.
- VIII. Claim 15, drawn to a shuffled polynucleotide, classified in class 536, subclass 23.1.
- IX. Claim 21, drawn to a method for phosphorylation, classified in class 435, subclass 68.1.
- X. Claims 11 and 22, in part, drawn to methods of treatment not using a polypeptide, classified in class 514, subclass 44.

Art Unit: 1652

- XI. Claim 23, drawn to a computer, classified in class 700, subclass 90.
- XII. Claim 24, drawn to a method for identifying a mutant polypeptide with altered properties, classified in class 435, subclass 18.
- XIII. Claim 25, drawn to a method for designing modulators, classified in class 702, subclass 19.

For each of inventions I-XIII above, restriction to one of the following is also required under 35 USC 121. Therefore, election is required of one of inventions I-XIII and one of inventions (A)-(D).

- (A.) A polynucleotide or polypeptide related to HPP1, SEQ ID NO: 149 and 150.
- (B.) A polynucleotide or polypeptide related to HPP2, SEQ ID NO: 151 and 152.
- (C.) A polynucleotide or polypeptide related to HPP5, SEQ ID NO: 41 and 42.
- (D.) A polynucleotide or polypeptide related to RET31, SEQ ID NO: 108 and 109.

Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Also, product and process inventions are distinct if any of the following can be shown: (1) that the process as claimed can be used to make another and materially different product, (2) that the product claimed can be used in a materially different process of using that product, or (3) that the product claimed can be made by another and materially different process (MPEP § 806.05(h)). These inventions are different or distinct for the following reasons.

Invention I is unrelated to Inventions III and XI because the products of Invention I are physically and functionally distinct chemical entities from the products of Inventions III and XI.

Art Unit: 1652

Invention II is unrelated to Inventions VIII and XI because the products of Invention II are physically and functionally distinct chemical entities from the products of Inventions VIII and XI.

Invention III is unrelated to Inventions VIII and XI because the products of Invention III are physically and functionally distinct chemical entities from the products of Inventions VIII and XI.

Invention VIII is unrelated to Invention XI because the products of Invention VIII are physically and functionally distinct chemical entities from the products of Invention XI.

Inventions IV-VII, IX, X, XII, and XIII are unrelated because the methods of said Inventions comprise different steps, utilize different products and/or produce different results.

Invention I is unrelated to Inventions IV, VI, IX, XII and XIII because the methods of Inventions IV, VI, IX, XII and XIII can neither use the product of Invention I nor be used to make said product.

Invention II is unrelated to Inventions V, VI, VII, X, XII and XIII because the methods of Inventions V, VI, VII, X, XII and XIII can neither use the product of Invention II nor be used to make said product.

Invention III is unrelated to Inventions IV, V, VII, IX, and XIII because the methods of Inventions IV, V, VII, IX, and XIII can neither use the product of Invention III nor be used to make said product.

Invention VIII is unrelated to Inventions IV, VI, IX, XII, and XIII because the methods of Inventions IV, VI, IX, XII, and XIII can neither use the product of Invention VIII nor be used to make said product.

Art Unit: 1652

Invention XI is unrelated to Inventions IV-VII, IX, and X because the methods of Inventions IV-VII, IX, and X can neither use the product of Invention XI nor be used to make said product.

The nucleic acids of Invention I are related to the proteins of Invention II by virtue of encoding the same. The DNA molecule has utility for the recombinant production of the protein in host cells. Although the DNA molecule and protein are related since the DNA encodes the specifically claimed protein, they are distinct inventions because they are physically and functionally distinct chemical entities, and the protein product can be made by another and materially different process, such as by synthetic peptide synthesis or purification from the natural source. Further, the DNA may be used for processes other than the production of the protein, such as nucleic acid hybridization assay.

The proteins of Invention II are related to the antibodies of III by virtue of being the cognate antigen necessary for the production of antibodies. Although the protein and antibody are related due to the necessary steric complementarity of the two, they are distinct inventions because they are physically and functionally distinct chemical entities and because the protein can be used in another and materially different process from the use for production of the antibody, such as in a pharmaceutical composition in its own right or in assays for the identification of agonists or antagonists of the enzyme.

The methods of Invention VII are related to the polynucleotides of Invention VIII as process of making and product made. However, the inventions are distinct because the polynucleotide can also be made by chemical synthesis.

Art Unit: 1652

The methods of Invention V, VII, and X are related to the polynucleotides of Invention I as a product and process of using. However, the inventions are distinct because the polynucleotides can also be used for making the encoded protein.

The methods of Invention IV and IX are related to the proteins of Invention II as a product and process of using. However, the inventions are distinct because the proteins can also be used for production of an antibody.

The methods of Invention VI, X, and XII are related to the antibodies of Invention III as a product and process of using. However, the inventions are distinct because the antibodies can also be used in methods for identifying compounds that bind to the cognate protein.

The methods of Invention V and X are related to the polynucleotides of Invention VIII as a product and process of using. However, the inventions are distinct because the polynucleotides can also be used for making the encoded protein.

The methods of Invention XII and XIII are related to the computer of Invention XI as a product and process of using. However, the inventions are distinct because the computer can also be used for word processing.

Inventions (A.)-(D.) are different inventions because they are physically and functionally distinct chemical entities.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art due to their recognized divergent subject matter, as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

Art Unit: 1652

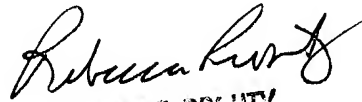
currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan L. Swope whose telephone number is 571-272-0943. The examiner can normally be reached on M-F; 9:30-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy can be reached on 571-272-0928. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Sheridan Lee Swope, Ph. D.


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